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ABSTRACT

This handbook was designed for those individuals interested in increasing their understanding of basic movement skill development, observation and assessment, and program implementation. The basic movement skills identified in the text are the essential building blocks on which all physical education, active play, recreation, and physical activity are based. Manipulation skills are associated with a child's ability to receive, handle, control, or propel an object with the hands or feet or with an implement. They include: ball rolling, bouncing, catching, underhand throwing, overhand throwing, striking and kicking. Transport skills enable a child to move from one point to another and are initially performed individually and then in combination. They include: running, jumping, hopping, galloping, and skipping. Underlying all movement, balancing abilities, characterized as static (stationary) and dynamic (moving), are necessary to maintain and control body position and posture while at rest or in motion. The main body of the document provides teaching hints, suggested teacher activities, progressions, equipment, and specific characteristics associated with each of three developmental phases--initial, formative, and mature. (LL)

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BASIC MOVEMENT SKILLS

K - 3

CURRICULUM SUPPORT SERIES

MANITOBA EDUCATION AND TRAINING

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INTRODUCTION

Purpose

This handbook has been prepared for those individuals interested in increasing their understanding of basic movement skill development, observation, assessment and program implementation. The basic movement skills, identified in this text as manipulation, transport and balancing skills, are the essential building blocks on which all physical education, active play, recreation and physical activity are based.

Basic Movement Skills (K-3) is a supplementary document intended to complement the program philosophy and objectives of the K-12 Physical Education curriculum guide.

The Importance of Basic Movement Skill Acquisition During Early Childhood

Childhood is the beginning of a lifetime process of change in a person's movement ability. Children love to move! At an early age, they begin to develop many different movement skills that enable them to explore and make discoveries about themselves and their surroundings.

The optimal time for children to learn and refine basic movement skills is during the early years of school. Factors contributing to the learning potential at this time are:

- physical growth and maturation (increased height and weight),
- learning from previous experience,
- motivation and enthusiasm to move, and
- enjoyment of repeated practice and activity.

Educators, childcare workers, parents and others have become increasingly attentive to the need for and value of movement opportunities during the early years. They are realizing the importance of the role of movement in a child's total development and the need to build upon the readiness of children between the ages of three and seven to learn movement skills.

Movement in the early years contributes to the child's overall growth and development. Children who engage in successful physical activity during their early years are more likely to continue an active lifestyle as adolescents and adults (Godin, Shapard, 1986; Seefeldt, 1984; Miller, 1978). This has long-term health implications. Learning to move well ensures that the skills necessary to develop and maintain fitness are in place. Participation in daily physical activities is endorsed by the Canadian and American Medical Associations.

Successful movement ability is also an important factor in socializing during the early years. Children who do not have the opportunity to acquire the basic movement skills are often excluded from physical activity and may avoid it. A lack of basic movement skills may well mean an exclusion from future participation as well.

BASIC MOVEMENT SKILLS DEFINED

The basic movement skills are the building blocks on which all other movement is based. Appearing frequently in a child's play and daily routines, these skills are the prerequisites to many lifetime and sports movement skills. These skills have been grouped into three areas: manipulation skills, transport skills and balancing abilities.

MANIPULATION SKILLS

- skills associated with the ability to receive, handle, control or propel an object with the hands or feet or with an implement
- they include:
  - rolling
  - bouncing
  - catching
  - underhand throwing
  - overhand throwing
  - striking
  - kicking

TRANSPORT SKILLS

- skills that enable a child to move from one point to another and are initially performed individually and then in combination
- they include:
  - running
  - jumping
  - hopping
  - galloping
  - skipping

BALANCING ABILITIES

- abilities underlying all movement
- are necessary to maintain and control body position and posture while at rest or in motion
- they are characterized as:
  - static (stationary)
  - dynamic (moving)

PHASES OF BASIC MOVEMENT SKILL ACQUISITION

Movement skills are developed in a predictable order. Whereas the rate, way and extent of learning is unique to each child, resulting in a wide variety of skills and abilities among children of the same age, the sequence of development is the same for all children, with skills progressing from simple to more complex movement. These changes help identify a child's movement ability. Specific characteristics are associated with each of three developmental phases:

INITIAL PHASE

- represents a child's first attempt at performing a movement skill
- characteristics are:
  - shyness
  - reluctance
  - unrhythmical movement
  - lack of accuracy and control
  - stiffness and rigidity
  - lack of preparation and follow-through
  - inaccurate timing
  - inconsistent performance
  - extraneous, superfluous movement

FORMATIVE PHASE

- represents a period of transition in performing a movement skill
- characteristics are:
  - characteristics of initial phase may still be present
  - more purposeful movement
  - more defined skill pattern

MATURE PHASE

- represents a period when all aspects of a skill can be used and applied to a variety of situations
- characteristics are:
  - rhythmical movement
  - controlled and coordinated movement
  - consistent performance

Those children who have difficulty performing the basic movement skills will benefit greatly from extra instruction time and practice opportunities. A child's difficulty may originate in one or several of the following factors:

- low fitness,
- lack of confidence,
- weight-related difficulties,
- early childhood illness or trauma,
- effects of medication, and
- other medical conditions.

Children experiencing difficulty will follow the same developmental sequence as other children; however, the rate of development distinguishes them from their peers (Seefeldt, 1984).

OBSERVATION AND ASSESSMENT OF BASIC MOVEMENT SKILLS

Research in early childhood development shows that teacher observations are the most valid and reliable sources of information in identifying a child's abilities and basic movement skills. Therefore, it is important for teachers to know "how" and "what" to observe while watching children move.

A child's response to the same task may vary greatly. This may be due to maturation, motivation, and previous opportunity. Repeated observation of a child in a variety of movement settings is an important consideration for making an accurate assessment. An example of a formal setting may be a screening or assessment session in a physical education class; an informal setting may be a free play session in the gymnasium, classroom or playground during recess or play time. Observation of a child exhibiting difficulties in "keeping up" or "joining in" with peers may indicate cause for concern and justify further observation and assessment. A variety of observation techniques should be used to identify the "quality" as well as the "quantity" of the movement.

The main purpose of the observation is to provide information on specific difficulties to determine the developmental phase (initial, formative, mature) of each skill and to identify an entry level for a program of appropriate instruction.

Initially, it is important to focus not only on a particular skill but also on the components of the skill. When observing a child perform a skill, the observer should isolate action of the head, arms, trunk (body position) and legs. An overall impression of the performance may also be included. It is beneficial to view a child's performance from different positions, including the front, rear and side. The skill should be observed from a position offering the most information.

Assessment of children's movement provides valuable insight for programming. Making appropriate activity choices to meet the individual needs of the child will foster the development of the child's movement potential.

FACTORS INFLUENCING CHILDREN'S PERFORMANCE

Factors that may influence a child's performance are:

- shyness, intimidation,
- previous learning,
- physical limitations,
- attitude,
- self-concept,
- feelings and/or emotions, and
- fear of failure.

Adverse influences may cause children to exhibit a wide variety of coping strategies when performing movement skills. Some children are masters at disguising their movement difficulties through disruptive behaviour, withdrawal, or shyness. For example, a child may constantly interrupt the observer with inappropriate remarks, or appear distracted by other things in the room. Comments on the child's method of coping should be included in an observational assessment.

In addition to identifying coping strategies, observers can gain information about a child's performance by noting such factors as physical appearance, facial expressions, emotional reactions, dress and ease of movement. Although not directly observable, a child's performance may further be affected by feelings, emotions, moods, attitudes or circumstances unrelated to the applied skill.

ORGANIZATION AND IMPLEMENTATION OF THE BASIC MOVEMENT SKILLS PROGRAM

Programming

The instructional physical education program at the early years level (K-3) focuses mainly on basic movement skills, including a variety of manipulation, transport and balancing activities that are age and developmentally appropriate. Since random activity selection and free play alone will not ensure maturation of the basic movement skills, regular instruction and planned purposeful activity are required to assist children in developing and refining their movement skills.

A developmentally based instructional physical education program should provide for the balanced movement skill development of all children (Gallahue, 1987). While it is unrealistic to assume that every child will excel in physical activity, it is not unrealistic to ensure that all are given the opportunity to participate. Therefore, the program should be designed to accommodate individual needs.

All children benefit from a quality physical education program; yet some children require additional instruction and opportunities for practice to improve their movement skills. Additional instructional programming can be organized in several ways, depending upon the age and needs of the child and the availability of space, equipment, time and leadership. Listed below are three options.

Station Approach

Students are divided into small groups and spend time practicing a movement skill in one area before moving on to a different activity.

Classroom Movement Centre Approach

An activity centre is located within the classroom to provide children with the opportunity to practice movement skills.

Small Group or Individualized Approach

A program of activities is developed to suit the individual needs of the child, with a suggested ratio of one leader to three children (1:3).

Administration

The development and implementation of a basic movement skills program requires the joint support of the school staff and administration. Shared commitment to a program in which movement is considered an important part of a child's total development will contribute to its success. Factors to be considered in program implementation are:

Leadership

Although varying in each school division according to available resources, movement skills programs are usually initiated by physical education teachers who have acquired a basic knowledge and understanding of growth, development and movement principles. Many movement skills programs also rely on early childhood teachers, resource teachers, instructional assistants, parents and student leaders whose interest and encouragement can contribute to improving a child's movement skills. A training program for support staff is, therefore, essential to ensure that they gain the requisite knowledge of movement, both in observing and programming for basic movement skills.

Space

Safety is an important consideration in selecting and using space for a movement skills program. If the gymnasium is not available, alternative spaces such as a hallway, classroom or multi-purpose room may be used, provided that the following safety aspects are considered.

- The activity area should be free of hazardous obstructions such as sharp or projecting objects.
- The activity area should provide enough space for the child to move safely; that is, away from walls, away from other activities, and away from unrelated large equipment.
- The boundaries of the activity space should be clearly defined by outlining the space to be used and pointing out clearance in all directions.

Equipment

When selecting and organizing equipment, the following should be considered.

- Ensure that equipment is available and/or set up prior to the child's arrival.
- Have enough equipment available to ensure maximum participation and avoidance of line-ups or lengthy waiting.
- Make careful equipment choices for teaching a specific skill.
- Select equipment suitable for the child's ability, taking into consideration the importance of a variety in size, shape and composition.

- Check all equipment regularly for wear and/or breakage.
- Incorporate bright and colourful equipment that contrasts with the working area and is easily seen.
- Use equipment appropriately for its intended purpose.
- Ensure that landing surfaces are adequately cushioned and secured.
- Spread mats in areas where a child could lose balance and fall, specifically around large equipment such as climbing apparatus, agility boxes, balance beams, and benches.

The challenge of an activity can be modified to suit individual skill levels by introducing different pieces of equipment. Suggested equipment choices are:

Small Equipment

Scarves (polyester chiffon)
Balloons (round shape)
Bean Bags
Beach Balls (approx. 18 cm)
Suspended Balls
High Density Foam Balls (approx. 15 cm)
Rubber Playground Balls (various sizes)
Hoops (small and large) /Bicycle Tires
Ropes (various lengths)
Golf Club Tubes (used for Hurdle Bars)
Traffic Cones/Pylons
Plastic Baseball Bats
T-Ball Stands
Sewing Elastic (approx. 8 m)
Wall Targets (various shapes and sizes)
Paddle Bats
Launching Boards
Hockey Pucks/Blocks for Balancing Tasks
Masking Tape/Survey Tape
Cut-outs (i.e., footprints, body parts)

Large Equipment

Stairs
Benches (wide and narrow sided)
Ladder
Rebounder
Mats (various sizes)
Agility Box and Incline Board
Elementary Hurdles (various heights)
Balance Beams
Climbing Apparatus
Large Foam Shapes

Time

The program option chosen will determine the amount of time scheduled. A classroom movement centre would be available on a daily basis for skill practice, whereas a program developed on a station, individualized or small group approach should be scheduled at least twice a cycle in addition to the regular physical education program.

Safety

Safety must be stressed in every aspect of the program.

- Supervision must be an active process prior to and during an activity to ensure that the space, equipment and activities are safe.

- Awareness of individual medical conditions which might affect safe participation in the program activities is essential.
- Students involved should be suitably dressed--i.e., wearing appropriate footwear (runners) or be barefooted; **stocking feet are unsafe.**

Evaluation

Evaluation is a multi-faceted, ongoing process which includes visual observation and written assessment.

- Evaluation of students should be done by the program supervisor (professional), taking into account information from program leaders.
- Informative and consistent record keeping should be established.
- Parents or guardians should receive verbal or written information about their child's development and progress. This communication should be initiated at the start and be ongoing throughout the identification process, continuing in the course of the programming and during evaluation or assessment. Parent-teacher conferences are the best means of communication.
- Follow-up of children within the context of group activities involving the whole class is a very important step in the ongoing programming of each child's movement skills program.

(See "Screening/Observation Tools" for suggestions on obtaining additional assistance in evaluating children's movement abilities).

PROGRAM CONSIDERATIONS

Instruction in basic movement skills should take into account the following program considerations.

Learning Environment

- Create an atmosphere where children feel comfortable and safe. A program built on successful movement experiences will encourage a child to attempt new challenges with greater confidence.
- Encourage active learning by providing specific feedback to the child, identifying difficulties and acknowledging effort.
- Use a variety of approaches to introduce activities and equipment, including problem-solving, modelling and questioning, as represented in the following examples:
  "How can you use your knees to land softly?"
  "Watch how _____ does it."
  "How did _____ use his/her knees?"

Practice and Repetition

- Opportunity for repetition and regular practice using a variety of equipment in many different ways is essential to the formation of movement skills. A child benefits from each practice attempt; consequently, many successful repetitions will result in the acquisition of skills.
- Since basic movement skills are learned gradually, it is important that movement activities follow a progressive sequence, and that each skill be broken down into simple steps. Skillful performance is accomplished by combining opportunity for practice, repetition and guided instruction.

Helpful Instructional Hints

- Work on one skill at a time or only one part of a skill. For example, if catching is to be practiced, eliminate and/or refrain from focusing on throwing.
- Reduce all elements of the movement except those required to perform the task. For example, practice throwing from a stationary position and gradually add more moving elements as the skill level improves.
- Reinforce key words and phrases so that the child will begin to develop and understand movement vocabulary.
- Encourage a child to complete a task without rushing through it.
- Enhance a child's understanding of movement through demonstration and peer modelling.

The following guidelines will be helpful in selecting equipment and activities promoting developmental progression from simple to more complicated movement. They are:
- big to small (dependent on skill),
- light to heavy,
- slow to fast,
- stationary to moving,
- low elevation to increased height, and
- floor tasks to apparatus tasks.

When introducing manipulation skills, start with light pieces of equipment that moves slowly and gives a child time to respond; for example, scarves and balloons help children overcome fear of objects coming toward them. Generally the transition from large to small equipment requires increased control and accuracy. However, in some tasks, a large piece of equipment is beneficial.

When introducing transport skills, stationary activities should precede moving tasks. Two-foot jumps should be introduced before single hops or alternating patterns, and single skill tasks should precede combined skill tasks.

When introducing balancing tasks, start with activities on and along the floor, gradually introducing other equipment that increases the distance of an activity from the floor and decreases the base of support, thereby making the activity more challenging.

When initiating new activities, encourage the child to make careful, slow, purposeful movement. Excessive speed in performing activities usually causes a breakdown in the applied skill during the initial practice attempts. While accuracy and speed will emerge with improved ability, initially they may hinder refinement and progress.

PROGRAM CONTENT:
UNDERSTANDING CHILDREN'S CHANGING MOVEMENT

MANIPULATION SKILLS

Manipulation skills are associated with the ability to receive, handle, control or propel an object with the hands or feet or with an implement. They include:
- rolling,
- bouncing,
- catching,
- underhand throwing,
- overhand throwing,
- striking,
- kicking.

Hand Position

In approaching a task requiring manipulation skills, the child initially shows stiffness and poor hand position, the arms contributing little to the movement. In time, the child develops a more relaxed hand position, thereby increasing the ease with which adjustments can be made to different pieces of equipment. The tasks of receiving and propelling an object are best performed with this improved hand position.

Foot Position

Initially standing with feet together and demonstrating little change in foot position, the child will develop to a point where the feet are in opposition (that is, one foot placed slightly ahead of the other and opposite to the hand being used). This transfer of body weight provides stability and contributes to the force that can be applied to an object.

Body Position

The child usually begins an activity in a stationary position, eventually stepping into the movement or using body rotation to contribute to the total efficiency of the movement.

BALL ROLLING

Characteristics:

INITIAL PHASE

- object batted or pushed at
- ball held between both hands with palms facing each other
- straddle stance
- sharp bend at waist
- backward arm swing through the legs
- forward arm swing through the legs
- trunk lift with release of ball
- eyes focus on ball

FORMATIVE PHASE

- one foot ahead of the other
- ball held with one hand on top, the other hand on the bottom
- backward arm swing at side of body
- limited knee bend
- eyes focus alternately on ball and target
- limited follow-through on forward swing

MATURE PHASE

- one foot ahead of the other
- ball held in one hand, on the side corresponding to back leg
- knee bend
- weight transfer
- release of ball at knee level or lower
- eyes focus on target

TEACHING HINTS

The child may be:	Suggested teacher activities:
- placing hands improperly on the ball	- begin with a large ball and decrease size with practice - vary the size of balls used and suggest correct hand position
- forgetting to transfer body weight in opposition	- suggest a step forward with the foot opposite to the hand used to roll ball - have the child initially sit, then kneel, then stand while rolling the ball
- releasing the ball too high, causing it to bounce	- suggest letting go of the ball when it is just in front of the front foot and near the floor - have the child start rolling an object close to a wall and then gradually increase distance
- performing a weak roll	- suggest a full arm backswing and forward follow-through
- rolling the ball in the wrong direction	- use large targets to promote success and then decrease size - have the child roll a ball from a stationary position before adding movement - encourage the child to watch the target - suggest using the follow-through hand to point in the direction the ball is intended to go

PROGRESSIONS

- Moving object over body parts
- Rolling a ball with both hands to a wall (sitting/kneeling/standing)
- Rolling a ball with both hands to someone (sitting/kneeling/standing)
- Rolling a ball with both hands between objects (i.e., pylons). Start with objects a wide distance apart, gradually decreasing the distance
- Rolling a ball with both hands to various targets
- Repeat the above, rolling a ball with one hand

EQUIPMENT

- Balls of various sizes and textures (beach balls, sponge balls, Cosom balls, tennis balls, playground balls)

BALL BOUNCING

Characteristics:

INITIAL PHASE

- hand contact with ball lacks rhythm
- excessive body movement
- ball may contact feet because it is kept close to the body
- fingers stiff
- body bent over ball
- feet together

FORMATIVE PHASE

- slapping motion
- one hand used
- arm outstretched
- feet spread apart to shoulder width
- limited control
- slight forward lean
- eyes watch ball
- ball caught after one bounce

MATURE PHASE

- arm bent at elbow
- one foot ahead of the other (opposition)
- pushing arm motion
- rhythmical series of bounces with control
- contact with ball initiated from fingertips
- focus of eyes can alternate between ball and direction of movement

TEACHING HINTS

The child may be:	Suggested teacher activities:
- slapping at the ball with open palm	- suggest pushing the ball down using relaxed cupped hand to control the bounce
- controlled by the ball instead of controlling the ball	- provide various kinds, sizes and colours of balls, ensuring that they do not blend in with the floor or background - structure the experience so the child can focus on one spot to bounce the ball (stationary) and then move about with control - have the child use a light-weight bouncing ball and/or one not fully inflated
- producing an inconsistent bounce, preventing the ball from returning to appropriate height	- suggest keeping the ball below the waist and completing follow-through on the push of the ball in a rhythmical pattern - provide various experiences at bouncing the ball using varying amounts of force at different levels - physically guide the child and/or the ball to develop the "timing" of the bounce - use percussion instruments or music to create rhythm

PROGRESSIONS

- Bouncing a ball with two hands (sitting/kneeling/standing: bounce-catch/bounce-catch)
- Stationary combinations (throw - bounce - catch)
- Bouncing and catching rhythmically
- Bouncing a ball with one hand (sitting/kneeling/standing)
- Bouncing at different levels (two hands/one hand/alternate hands)
- Bouncing and moving in specific directions (two hands/one hand-forwards/backwards/sideways)
- Bouncing inside targets/patterns

EQUIPMENT

- Balls of various sizes (beach balls, playground balls)

CATCHING

Characteristics:

INITIAL PHASE

- poor tracking (eyes not focused on the ball)
- feet together
- fear of/shying away from object
- scooping arm action
- limited arm action
- arms extended straight with palms up
- body used to catch the ball

FORMATIVE PHASE

- trapping object against the body
- elbows held at sides at 90 degree angle
- one foot ahead of the other
- palms inward and thumbs up
- timing usually poor

MATURE PHASE

- arms relaxed and bent and "give" with the ball
- hands catch object
- adjustment to flight and size of object
- body position adjusted to catch the ball
- one foot slightly ahead of the other to absorb the force of the ball
- eyes follow the ball

TEACHING HINTS

The child may be:	Suggested teacher activities:
- keeping fingers rigid and straight	- use a soft, flexible object that is light in weight and slow moving for initial catches, progressing from large to small objects
- taking eyes off the object	- use brightly coloured objects distinguishable from the background against which the ball is to be caught - manually assist the child
- using incorrect hand position	- give verbal cues such as, "Ready," "Watch the ball," etc. - suggest pointing thumbs in for catching balls above the waist and thumbs out for balls below the waist
- afraid of the object	- vary the speed and direction of the object only when the child is comfortable catching the object from the front
- losing control of the object	- have the child move directly in the path of the ball and pull it toward the body - have the child use a suspended or tethered ball

PROGRESSIONS

- Catching with two hands (stationary to moving)
- Catching with one hand (stationary to moving)
- Catching objects with the use of a launching board (two hands/one hand)
- Catching objects with the use of implements (two hands/one hand)

EQUIPMENT

- Light to heavy (chiffon scarf, balloon, suspended ball, beach ball, sponge ball, rubber ball)
- Large to small
- Slow to fast

UNDERHAND THROWING

Characteristics:

INITIAL PHASE

- no backswing or follow-through
- two-hand push
- feet together, no forward step
- throwing from chest
- side arm throwing action

FORMATIVE PHASE

- wrist flick action
- slight backswing
- poor timing in releasing ball
- feet together
- stepping with foot on the same side as throwing hand

MATURE PHASE

- full arm swing
- one foot ahead of the other (in opposition to throwing arm)
- ball thrown from in front of body
- weight transfer
- ball released approximately at waist level

TEACHING HINTS

The child may be:	Suggested teacher activities:
- standing with feet together	- suggest placing one foot ahead of the other for better balance and body control (in opposition)
- using only the wrists to throw the object	- have the child make full arm swing movement with a full follow-through
- releasing the ball too early or too late	- provide a large target and suggest the object be released around waist level
	- help the child focus on throwing for distance to develop mature movement, gradually working toward accuracy

PROGRESSIONS

- Throwing underhand with two hands (stationary to moving)
- Throwing underhand with one hand (stationary to moving)
- Throwing objects with the use of implements (two hands/one hand)

Mature one-hand underhand throw

EQUIPMENT

- Light to heavy (balloon, beach ball, foam ball, playground ball)
- Large to small

OVERHAND THROWING

Characteristics:

INITIAL PHASE

- elbows held tightly against the body, with elbow action mainly in a forward direction
- little or no trunk action
- no shift of body weight
- feet together
- arm simply drops with little or no follow-through
- body generally faces the target

FORMATIVE PHASE

- forward step with leg on same side as throwing arm
- ball held behind head
- shoulders rotate towards throwing side
- shift of body weight; step forward with foot on same side as throwing arm
- arm action forward and high over shoulder

MATURE PHASE

- opposite arm used for balance and direction
- arm flexed at the elbow
- elbow held at shoulder height or higher
- throwing hand behind head, shoulder drops slightly
- elbow leads throw, forearm drops and rotates, thumb points down
- follow-through across midline
- upper body rotates so that opposite shoulder faces target
- rotation occurs through the hips, legs, spine and shoulder
- weight shifts to rear foot upon preparation of throw
- weight shifts forward upon throwing and a step forward is taken by the foot opposite to the throwing arm
- toes point at the target, allowing hips and shoulders to open to the target (step should be across the midline of the body)

TEACHING HINTS

The child may be:	Suggested teacher activities:
- losing balance while throwing	- suggest taking the body out of the throw and have the child sit/kneel/stand while practicing - place an object on the floor onto which the child can step
- taking a step forward with the foot on the same side as the throwing arm	- provide numerous opportunities and verbal cues for stepping with the foot opposite to the throwing arm (e.g., use footprints for stepping pattern)
- unable to release the ball in the desired path	- have the child point the toes in the direction the object is to be thrown - have the child turn the non-throwing shoulder toward a target
- avoiding a preparatory backswing	- have the child raise the throwing arm and point toward a target - provide objects that are easy to grip and work for distance

PROGRESSIONS

- Throwing with two hands (stationary to moving)
- Throwing with one hand (stationary to moving)
- Throwing objects with the use of implements (two hands/one hand)

EQUIPMENT

- Size of object depends upon the throw being practiced
- Large to small
- Light to heavy (balloon, beach ball, foam ball, playground ball, bean bag, tennis ball)

STRIKING

Characteristics:

INITIAL PHASE

- vertical chopping action
- feet together and stationary
- trunk facing direction of ball being struck
- no trunk rotation
- elbows bent
- no transfer of body weight

FORMATIVE PHASE

- trunk turned with limited hip rotation
- transfer of weight; feet positioned shoulder width apart
- elbow held close to body and slightly bent
- horizontal swinging action

MATURE PHASE

- hip and trunk rotation
- transfer of weight from back foot to front foot
- full striking action with preparatory backswing and follow-through
- eyes focused on object being struck (tracking)
- follow-through on horizontal swinging pattern

TEACHING HINTS

The child may be:	Suggested teacher activities:
- failing to watch the object being struck	- have the child practice striking stationary objects prior to moving ones and check to see if eye focus is maintained on the object
- chopping at the object	- initiate striking large, brightly coloured objects and progress to smaller ones - stress making a "big swing"
- keeping elbows too close to the body	- suggest keeping arms relaxed and have the child swing without an implement on a horizontal plane - check for shift of body weight from back foot to front foot as the child swings
- withholding force when striking the object	- suggest a full backswing and follow-through and stress contacting object with elbows fully extended
- holding the striking paddle or bat incorrectly	- adjust the child's hand position according to left- or right-handed abilities (if the child is right-handed, the right hand should be above the left on the bat)

PROGRESSIONS

- Stationary to moving objects
- Open palm to short-handled implement to long-handled implement
- Large to small object

EQUIPMENT

- Suspended ball, wooden paddle, ball stand and large plastic bat

KICKING

Characteristics:

INITIAL PHASE

- no preparation or follow-through
- kicking at the ball
- arms used for balance
- kick initiated at the knee
- tendency to use toes
- dominant leg used
- body held stiffly

FORMATIVE PHASE

- some preparation
- kicking leg stays bent
- tendency to use top of the foot
- improved balance and body control
- body more relaxed

MATURE PHASE

- kick initiated at the hip
- arms swing in opposition
- kicking with force and accuracy
- "stepping" into the ball
- body bends at waist throughout the movement

TEACHING HINTS

The child may be:	Suggested teacher activities:
- losing balance	- provide numerous experiences with various sizes of balls, progressing from stationary to moving objects, and suggest using arms for balance - provide an object for the child to lean on while kicking
- demonstrating inefficient opposition of the arms and legs	- have the child stand behind the ball and slightly to the side from which the ball is to be kicked - have the child step forward with the non-kicking foot, while moving the opposite arm forward
- jabbing "at" the ball	- have the child work for control in kicking by aiming for distance initially rather than for accuracy
- failing to contact the ball squarely or missing the ball completely	- suggest watching the ball and following through in the direction the ball is to go - supply large, colourful balls that contrast with the background
- kicking the ball without getting any distance	- have the child swing the kicking leg back and then fully forward from the hip

PROGRESSIONS

- Kicking an imaginary ball
- Kicking stationary to moving objects
- Kicking for distance, then accuracy

EQUIPMENT

- Large to small
- Light to heavy (balloon, beach ball, deflated rubber ball, soccer nerf ball, rubber ball)

TRANSPORT SKILLS

Transport skills enable a child to move from one point to another and are initially performed individually and then in combination.
They include:
- running,
- jumping,
- hopping,
- galloping, and
- skipping.

Arm Movement

The child begins a movement with little arm involvement. Eventually, as the skill develops, arm movement becomes very important in initiating and finishing a movement.

Foot Placement

In the early stages landings are usually stiff and heavy and often flat-footed. Later, as the child learns to use the balls of the feet, landings become soft and controlled.

Body Position

The child will develop from a motion exhibiting very little preparation or change of body position during the performance of a skill to a movement that includes the efficient coordinated use of the total body.

RUNNING

Characteristics:

INITIAL PHASE

- no use or improper use of arms
- motion resembles fast walk
- stiff, uneven stride
- wide base of support
- no lift off ground
- heavy, flat-footed steps
- difficulty changing direction and stopping

FORMATIVE PHASE

- some lift off ground
- arms swing sideways
- some flight between steps
- less difficulty in changing direction and stopping

MATURE PHASE

- running with flight
- natural arm swing in opposition to the feet
- balance maintained
- ability to run, stop and change directions
- supporting leg extended completely
- arms swing in a forward-backward motion
- eyes forward-looking

TEACHING HINTS

The child may be:	Suggested teacher activities:
- neglecting to use the arms or holding them out at the sides for balance	- have the child bend the elbows slightly while swinging the arms freely forward and backward at the sides
- demonstrating exaggerated forward-leaning of the trunk or twisting from side to side	- suggest leaning slightly into the run
- landing flat-footed	- recommend pushing off from the balls of the feet and running lightly - ask the child to run so that the heels come into contact with the ground first - suggest the child practice kicking heels up behind the body while running
- displaying poor balance when changing direction or stopping	- encourage the child to slow down when changing direction and before stopping

PROGRESSIONS

- Running in specific directions (forward/backward)
- Running around obstacles
- Changing direction while running and stopping when asked

EQUIPMENT

- Begin with unobstructed floor space and gradually incorporate objects (geometric shapes, pylons, hoops, hurdles, stairs)

JUMPING

Characteristics:

INITIAL PHASE

- little or no knee bend on take-off or landing
- uneven take-off with one foot leading
- little arm action
- stepping action
- head bent down

FORMATIVE PHASE

- slight forward lean
- one-foot take-off and two-foot landing
- slight crouch, more bend in knees upon landing
- arm action initiated, with some forward swing
- head partially raised and eyes focused ahead

MATURE PHASE

- two-foot take-off and two-foot landing
- knees bent in preparation for jump and in landing
- full arm swing in backward and forward direction
- ability to jump in various patterns and directions
- head raised and eyes focused forward in direction of travel
- body bent at the waist in preparation for jumping and leaning into the movement

TEACHING HINTS

The child may be:	Suggested teacher activities:
- using very little arm action	- provide verbal cues to encourage a backward swing and a full forward swing - encourage jumping for distance
- landing flat-footed	- suggest landing on the balls of the feet
- jumping with a stiff, rigid body	- encourage bending knees and maintaining a relaxed body position
- afraid to jump	- provide floor targets - introduce jumping patterns of increasing complexity, beginning with jumping in place on the floor, then jumping over low obstacles, and finally jumping down from low objects
- "earthbound"	- provide the opportunity for the child to jump on a rebounder

PROGRESSIONS

- Jumping in place
- Jumping in directions (forward, backward, side to side "zig-zag")
- Jumping over obstacles
- Jumping down from various heights
- Jumping for distance
- Jumping in patterns

EQUIPMENT

- Suitable for jumping on the ground and from various elevations (free floor space, lines on the floor, geometric shapes on the floor, ropes and hoops, rebounder, various hurdles, low-level bench, agility boxes of various heights)

HOPPING

Characteristics:

INITIAL PHASE

- flat-footed landing
- exclusive use of preferred foot
- few repetitions possible
- little lift off ground
- difficulty maintaining balance
- uncontrolled arm and leg movement (extraneous movement)
- leg raised in front of the body at a 90 degree angle

FORMATIVE PHASE

- increased body control
- arms used for balance and lift
- increased repetitions of rhythmical hopping
- knee held lower in front of the body at a 45 degree angle
- slight forward lean

MATURE PHASE

- arms used for lift
- consecutive, rhythmical hopping
- knee held behind the body at a 90 degree angle
- ability to hop in various patterns and directions

TEACHING HINTS

The child may be:	Suggested teacher activities:
- hopping flat-footed	- suggest pushing off from the toes and landing on the ball of the foot and stress soft landing
- making exaggerated movements with arms and free leg	- recommend moving arms slightly while springing up from a hop
- losing balance	- promote increased body control by having the child begin to hop close to a wall for support and then having the child move away to a free space and eliminating the support - encourage the use of the arms
- able to hop on preferred foot only	- have the child use the support of an object (table, etc.) and build strength through repetition, initially emphasizing control rather than speed or distance - provide activities and floor patterns that require hopping on the left and right foot
- "earthbound"	- provide the opportunity for the child to hop on a rebounder

PROGRESSIONS

- Hopping in one place with support and working towards hopping without assistance
- Hopping forward with support and working towards eliminating support
- Hopping along shapes and patterns
- Hopping on non-preferred foot, attempting the above
- Hopping in patterns and directions (forward, backward, sideways)

EQUIPMENT

- Begin practicing the skill from a given position on the floor, gradually incorporating obstacles and elevations (free floor space, lines on the floor, geometric shapes, ropes and hoops, obstacles, various hurdles, rebounder)

GALLOPING

Characteristics:

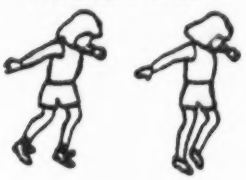
INITIAL PHASE

- sideways movement with a slide step
- no arm action
- frequent reverting to running
- exclusive use of preferred foot as lead
- stiff and rigid movement
- unrhythmical action

FORMATIVE PHASE

- arms used for balance at the sides
- exclusive use of preferred foot as lead (one-sided)
- unrhythmical (choppy/stiff) motion
- exaggerated vertical lift

MATURE PHASE



- either foot used as lead
- rhythmical, flowing movement
- low flight
- relaxed motion
- ability to change direction and alternate lead foot without stopping

TEACHING HINTS

The child may be:	Suggested teacher activities:
- keeping the legs too straight	- suggest keeping the knees bent slightly and moving on the balls of the feet, with trunk slightly forward
- unable to move in different directions	- provide various opportunities and experiences for the child to lead with either foot and work towards relaxed, rhythmical movement
- crossing the feet or overstepping the back leg	- have the child step to the side and then quickly draw up the other foot - encourage the child to repeat the action several times, landing with the same foot each time
- unrhythmical	- provide a beat with a tabour, drum or music, while having the child clap the beat to a gallop
- galloping sideways	- face the child and hold hands while galloping (the child gallops forward while the teacher goes backwards) - attach pieces of tape or paper circles on front of child's hips, encouraging the child to pretend they are headlights lighting the way
- having difficulty with the transfer of weight from one foot to another	- have the child step forward and backward in a rocking motion

PROGRESSIONS

- Moving sideways without crossing feet (step-together-step sequence)
- Rocking back and forth with one foot ahead of the other, toes pointing forward
- Walking forward with one foot always leading (step-together, step-together, etc.)
- Galloping forward using preferred foot as lead
- Galloping around obstacles
- Repeating the above using the other foot as lead

EQUIPMENT

- Begin with free floor space and work towards specific directions and pathways, eventually adding obstacles

SKIPPING

Characteristics:

INITIAL PHASE

- exaggerated knee lift
- flat-footed landing
- skipping with one foot and stepping with the other (one-sided skipping)
- unrhythmical movement
- double hops
- no arm action

FORMATIVE PHASE

- step-hop pattern
- flat-footed landing
- unrhythmical movement
- uncontrolled use of arms
- arms swing but not in opposition to the feet

MATURE PHASE

- both sides of the body used
- arms swing in opposition to the feet
- rhythmical movement
- ability to change direction and speed

TEACHING HINTS

The child may be:	Suggested teacher activities:
- skipping on one foot and hopping on the other, unable to use both sides of the body	- provide a slow-motion demonstration - encourage the child to step forward and then hop on the same foot, repeating the action with the other foot - break down skipping into a step-hop pattern (verbalize the movement)
- using the arms excessively or not at all	- suggest the child swing the arms upward in time with the legs in a forward and backward motion
- concentrating unduly	- encourage the child to relax and avoid undue concentration on the movement pattern
- unable to travel in a straight line	- provide a floor pattern for the child to follow
- landing heavily on the feet	- have the child land on the balls of the feet and use rhythmical instruments or soft music to encourage a light landing

PROGRESSIONS

- Hopping in one place, first on one foot then the other (right foot three times/left foot three times; right foot two times/left foot two times; right foot once/left foot once)
- Taking a step-hop on alternate feet (skipping)
- Skipping forward
- Skipping around objects

EQUIPMENT

- Begin with free floor space and work towards directions and pathways and then incorporate obstacles.

BALANCING ABILITIES

Underlying all movement, balancing abilities are necessary to maintain and control body position and posture while at rest or in motion.

They are characterized as:
- static (stationary), and
- dynamic (moving).

In developing balancing abilities, a child will initially exhibit a lot of extraneous movement, instability, and lack of control, but will eventually learn to maintain balance by making subtle body adjustments that do not always involve the total body. Balance can be achieved by a change in body position or through use of the arms.

While at first requiring assistance or support to maintain balance, a child will gradually develop the ability to balance more independently.

Children should know that head position and eye focus on an object at eye level contribute to success in balance activities.

STATIC BALANCING

Characteristics:

INITIAL PHASE
- excessive use of the arms (extraneous movement)
- brief balancing without support
- eyes directed at feet
- inconsistent leg preference

FORMATIVE PHASE

- effort at balance in "tied-in" position (arm and/or leg held tightly against the body)
- better performance on dominant leg
- eyes focused ahead

MATURE PHASE

- arms used as needed to maintain balance
- ability to maintain a steady balance in a variety of positions
- eyes focused on an external object
- controlled balance maintained both on dominant and non-dominant leg

TEACHING HINTS

The child may be:	Suggested teacher activities:
- having difficulty maintaining balance	- assist the child when needed - offer a hand or suggest using a wall for assistance, encouraging the child to lessen the security of the grasp as balance is gained
- holding one arm or leg to the side of the body while balancing	- encourage good body position by providing plenty of variety and opportunities for experimentation
- looking at the feet	- encourage the child to focus on an object/ person positioned in front of the child or to identify numbers held up in front of the child

PROGRESSIONS

- Stationary balancing on various body parts (body balance puzzles ranging from one to five body parts)
- Stationary balancing with moving body parts (forward/backward/sideways)
- Stationary balancing while picking up objects (twisting/turning/crouching)

EQUIPMENT

- Lower levels to elevated levels (floor space--lines on floor, ropes on floor; objects--bean bags, hockey pucks, etc.)

DYNAMIC BALANCING

Characteristics:

INITIAL PHASE

- assistance needed
- slow shuffle step
- dominant foot leads
- eyes focused on feet
- body tense and rigid

FORMATIVE PHASE

- balance easily lost
- over-use of the arms (extraneous movement)
- initial demonstration of alternate foot pattern
- poor spacing of feet
- eyes focused down

MATURE PHASE

- alternate stepping action
- eyes focused ahead and down
- arms used as needed to maintain balance
- ability to move forwards, backwards and sideways

TEACHING HINTS

The child may be:	Suggested teacher activities:
- unable to maintain balance	- assist the child when needed
- unable to balance unaided	- offer a hand or suggest using the wall for assistance, encouraging the child to lessen the security of the grasp as balance is gained
- leading with one foot only (demonstrating improper foot placement)	- encourage the child to place the toes of one foot against the heel of the other
- looking down at the feet	- encourage the child to focus ahead by looking forward and slightly down
- unable to change levels or directions	- begin with low level activities prior to introducing high level activities
- unable to use arms effectively to compensate for balance changes	- provide numerous balancing experiences utilizing a variety of equipment - encourage body control by having the child use the arms held out to the sides

PROGRESSIONS

- Holding some body parts stationary while moving other body parts
- Walking forward (large steps, then little steps)
- Walking over obstacles (large steps, then little steps)
- Walking in directions (forwards/backwards/sideways)
- Turning while doing combinations of the above
- Balancing on elevated surfaces (balance boards, ladder, wide side of bench, narrow side of bench)
- Balancing on small objects while moving (hockey pucks, small blocks, etc.)
- Doing a combination of tasks that involve carrying objects on various body parts

EQUIPMENT

- Lower levels to elevated levels (free floor space, lines on floor, ropes on floor, geometric shapes, balance boards, ladder on floor, wide side of bench, narrow side of bench, inclined ladder and bench)

SCREENING/OBSERVATION TOOLS

Numerous standardized tests are available to assess a child's movement ability; however, there is an indication that such tests have considerable limitations and that many are of questionable reliability and validity. Often the quantitative aspect of the child's movement is recorded (whether a child has or has not performed a task) with little or no attention being given to assessing the quality of the child's performance (the cause or reason why).

Teacher observations are an effective alternative to standardized tests in identifying children's movement abilities. It is important that teachers know "how" and "what" to observe when watching children move, as outlined in this document.

Observation of children's basic movement skills in a variety of active settings (gymnasium, playground, free play area) is a good beginning to developing profiles of children's abilities. This will provide the observer with information on individual strengths and weaknesses and help identify those children having difficulties performing basic movement skills. Care should be taken to identify children who avoid active play situations, withdraw from participation or show signs of hesitation or fear.

The following school divisions have screening/observation tools available upon request and may be of assistance in sharing their information.

Assiniboine South School Division No. 3
3401 Roblin Boulevard
Winnipeg, Manitoba
R3R 0C6
(204) 889-5523

Contact: Jack Parrington
Physical Education
Supervisor

River East School Division No. 9
589 Roch Street
Winnipeg, Manitoba
R2K 2P7
(204) 667-7130

Contact: Barb Cerilli
Motor Skills Resource
Teacher

Winnipeg School Division No. 1
Rockwood Educational Resource Centre
350 Rockwood Street
Winnipeg, Manitoba
R3M 3C5
(204) 452-9007

Contacts: Joanne Macbeth,
Sandy Barr and
Dave Fitzpatrick
Motor Skills
Resource Teachers

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